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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/740,846	12/21/2000	Ji Woong Kim	K-244	6517
34610	7590	11/18/2005	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			PHILLIPS, HASSAN A	
			ART UNIT	PAPER NUMBER
			2151	

DATE MAILED: 11/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/740,846	KIM, JI WOONG	
	<b>Examiner</b>	<b>Art Unit</b>	
	Hassan Phillips	2151	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 August 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 8-22 and 24-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-22 and 24-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This action is in response to communications filed on August 26, 2005.

#### ***Response to Arguments***

2. Applicant's arguments, see remarks, filed August 26, 2005, with respect to the pending claims have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Thurm et al. (hereinafter Thurm).

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 8-16, 22, 24-27, 29, are rejected under 35 U.S.C. 103(a) as being unpatentable over Fowler in view of Thurm.

5. In considering claims 8 and 22, Fowler discloses a microwave oven comprising: a microcomputer, (col. 7, lines 63-65); obtaining cooking information over a network, (col. 10, lines 62-67, col. 11, lines 1-25); a converter which automatically converts the cooking information into a form recognizable by the microcomputer, the

microcomputer generating a control signal to cook food based on the converted cooking information in response to a user signal, (col. 27, lines 10-17).

Although the disclosed apparatus of Fowler, shows substantial features of the claimed invention, it fails to expressly disclose: an Internet search for cooking information in response to a first user signal, the first user selecting one of displayed results of the Internet search to automatically cook food.

Nevertheless, in a similar field of endeavor Thurm discloses: an Internet search for cooking information in response to a first user signal, the first user selecting a displayed result of the Internet search to automatically cook food, (see page 1).

Thus, given the teachings of Thurm, it would have been obvious to a person of ordinary skill in the art, at the time of the present invention, to modify the teachings of Fowler to show downloading cooking information from the Internet in response to a first user signal, and selecting one of displayed results from the downloaded information to automatically cook food. This would have provided a simple, efficient, user-friendly means for accessing appropriate cooking information over the Internet by the touch of a button, and then having a microwave automatically cook food by selecting one of the displayed results from the downloaded information (Thurm, page 1).

6. In considering claim 9, Fowler teaches the cooking information configuring at least one cooking parameter of the oven, and wherein the food is cooked in accordance with the at least one parameter in response to the user signal. See col. 27, lines 10-17.

7. In considering claim 10, Fowler further teaches a display for displaying the cooking information. See col. 6, lines 47-67, col. 7, lines 1-5.

8. In considering claim 11, Fowler teaches a user signal selecting the cooking information on the display. See col. 26, lines 53-61.

9. In considering claim 12, Fowler teaches a user signal generated from activation of a cooking start button. See col. 25, lines 32-51.

10. In considering claim 13, Thurm teaches a search engine for obtaining the cooking information from an Internet site. See page 1. One of ordinary skill in the art would combine the teachings of Fowler with Thurm for the reasons indicated in consideration of claim 8.

11. In considering claim 14, it is implicit in the teachings of Fowler that the microcomputer receives the converted signal containing cooking information from the converter based on a data transmission available signal. See col. 7, lines 65-67, col. 8, lines 1-6.

12. In considering claim 15, it is implicit in the teachings of Fowler that the data transmission available signal indicates that the converter is in a state for sending data to the microcomputer. See col. 8, lines 24-28.

13. In considering claim 16, it is implicit in the teachings of Fowler that the data transmission available signal assumes a first level when the converter is in a state for sending data to the microcomputer and assumes a second level when the microcomputer is in a state for receiving data from the converter. See col. 27, lines 25-43.

14. In considering claim 24, Fowler teaches the user signal generated when the user presses a cook start button. See col. 25, lines 32-51.

15. In considering claim 25, Fowler teaches the microcomputer controlling the oven to cook food based on a set of control signals. See col. 25, lines 45-51.

16. In considering claim 26, Fowler teaches a first control signal allowing the microcomputer to sense an operational state of a signal converting unit. See col. 25, lines 45-51.

17. In considering claim 27, Fowler further teaches the microcomputer recognizing a data transmission zone of the signal converting unit when the first control signal assumes a first level, and recognizes a data transmission zone of the microcomputer when the first control signal assumes a second level. See col. 18, lines 65-67, col. 19, lines 1-12.

18. In considering claim 29, although it is not expressly stated, it is implicit in the teachings of Fowler that a third control signal is a data read control signal which is input into the microcomputer when the first control signal assumes the first level. See col. 27, lines 25-43.

19. Claims 17-21, 28, 30-32, are rejected under 35 U.S.C. 103(a) as being unpatentable over Fowler in view of Thurm, and further in view of Perholtz et al. (hereinafter Perholtz), U.S. patent 5,732,212.

20. In considering claim 17, although the disclosed apparatus of Fowler, shows substantial features of the claimed invention, it fails to expressly disclose: a global interrupt signal.

Nevertheless, global interrupt signals were well known in the art at the time of the present invention. This is shown in a similar field of endeavor where Perholtz teaches a system and method for remotely controlling a data processing device comprising: Inputting an interrupt signal into a microcomputer when scan codes become available for translation, (col. 38, lines 66-67, col. 39, lines 1-5).

Thus, given the teachings of Perholtz, it would have been obvious to a person of ordinary skill in the art, at the time of the present invention, to modify the teachings of Fowler in order to show a global interrupt signal being input into the microcomputer when a data transmission available signal assumes a first level. This would have

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invoked a routine to cook food in the microwave oven after the cooking information obtained from the Internet site was converted into form recognizable by the microcomputer and ready to be transmitted to the microcomputer, Perholtz, col. 39, lines 5-8.

21. In considering claim 18, it is implicit in the teachings of Fowler that a data read control signal is input into the microcomputer when the data transmission available signal assumes a first level. See col. 27, lines 25-43.

22. In considering claim 19, the teachings of Fowler provide a means for the data read control signal to be a 1-byte interrupt signal. See col. 27, lines 38-43.

23. In considering claim 20, Fowler teaches the microcomputer receiving the converted signal containing the cooking information in synchronism with a data receive property signal, and the microcomputer recognizing that it is in a ready state to receive data when the data receive property signal assumes a first value and recognizes that it is in a state where data reading has been completed with the data receive property signal assuming a second value. See col. 27, lines 25-43.

24. In considering claim 21, the teachings of Fowler provide a means for the data transmission available signal, the global interrupt signal, the data read control signal,



and the data receive property signal to be received through different ports of the microcomputer. See col. 27, lines 25-43.

25. In considering claim 28, although the disclosed apparatus of Fowler, shows substantial features of the claimed invention, it fails to expressly disclose: a global interrupt signal.

Nevertheless, global interrupt signals were well known in the art at the time of the present invention. This is shown in a similar field of endeavor where Perholtz teaches a system and method for remotely controlling a data processing device comprising: inputting an interrupt signal into a microcomputer when scan codes become available for translation, (col. 38, lines 66-67, col. 39, lines 1-5).

Thus, given the teachings of Perholtz, it would have been obvious to a person of ordinary skill in the art, at the time of the present invention, to modify the teachings of Fowler in order to show a second control signal being a global interrupt signal which is input into the microcomputer when the first control signal assumes the first level. This would have invoked a routine to cook food in the microwave oven after the cooking information obtained from the Internet site was converted into form recognizable by the microcomputer and the first control signal assumed its first level, Perholtz, col. 39, lines 5-8.

26. In considering claim 30, the teachings of Fowler provide a means for the data read control signal to be a 1-byte interrupt signal. See col. 27, lines 38-43.

27. In considering claim 31, Fowler teaches the microcomputer recognizing that it is in a ready state to receive data when a fourth control signal assumes a first value and recognizes that it is in a state where data reading has been completed when the fourth control signal assumes a second value. See col. 27, lines 25-43.

28. In considering claim 32, the teachings of Fowler provide a means for the first, second, third, and fourth control signals to be received through different ports of the microcomputer. See col. 27, lines 25-43.

29. Claims 33-38, are rejected under 35 U.S.C. 103(a) as being unpatentable over Emmott et al. (hereinafter Emmott), EP Patent 0 965 795 in view of Thurm.

30. In considering claim 33, Emmott discloses an Internet microwave oven comprising: an access unit connected to a communication line, for accessing the Internet, (col. 4, lines 9-12); a search engine to perform a search for cooking information when the Internet is accessed through the access unit, (col. 3, lines 17-27); a microcomputer, (col. 5, lines 23-39); a display unit for displaying results of the Internet search, (col. 3, lines 42-48).

Although the disclosed apparatus of Emmott, shows substantial features of the claimed invention, it fails to explicitly disclose: automatically outputting a control signal to cook food depending on information selected by the user.

Nevertheless, in a similar field of endeavor, Thurm both suggests and teaches: a signal converting unit for receiving downloaded cooking information associated with one of the displayed results and for automatically converting the downloaded cooking information into a signal capable of being recognized by the microcomputer when said one of the displayed results is selected by a user, said signal corresponding to the converted cooking information controlling the microcomputer to automatically set the oven to perform a cooking operation in response to a user signal, (see page 1).

Thus, given the teachings of Thurm, it would have been obvious to a person of ordinary skill in the art, at the time of the present invention, to modify the teachings of Emmott to show automatically outputting a control signal to cook food depending on information selected by the user. This would have provided a simple, efficient, user-friendly means for performing cooking operations by downloading cooking information, displaying the cooking information, and using the downloaded information selected by a user from the display to cook food automatically, (Thurm, page 1).

31. In considering claim 34, Emmott teaches a modem for an access unit. See col. 4, lines 9-12.

32. In considering claim 35, it is implicit in the teachings of Emmott that the search engine is an Internet browser. See Emmott, col. 5, lines 23-39.

33. In considering claim 36, Emmott teaches a liquid crystal display (LCD) for a display unit. See col. 4, lines 51-57.

34. In considering claim 38, although the disclosed teachings of Emmott show substantial features of the claimed invention, they fail to expressly disclose: communication between a search engine and a signal converter in accordance with RS-232C standards.

Nevertheless, it would have been apparent to one of ordinary skill in the art to use an RS-232C interface because it is a standard used for communication between computers, terminals, and modems.

Thus, it would have been obvious to a person of ordinary skill in the art, at the time of the present invention, to modify the teachings of Emmott, in order to communicate between the search engine and a signal converter by means of RS-232C standards. This would have provided a well known method of communication for Internet browsing, when using the Internet microwave oven disclosed by Emmott, col. 5, lines 23-39. The claimed invention (claim 38) therefore, would have been an obvious modification of the teachings disclosed by Emmott.

35. Claim 37, is rejected under 35 U.S.C. 103(a) as being unpatentable over Emmott in view of Thurm, and further in view of Fowler.

36. In considering claim 37, although the teachings of Emmott show substantial features of the claimed invention, they fail to expressly disclose: a microcomputer recognizing a data transmission zone of the signal converting unit if a high signal generated by the signal converting unit is applied to the microcomputer, while the microcomputer recognizes a data transmission zone of the microcomputer if a low signal is applied to the microcomputer.

Nevertheless, Fowler teaches a microcomputer recognizing a data transmission zone of the signal converting unit if a high signal generated by the signal converting unit is applied to the microcomputer, while the microcomputer recognizes a data transmission zone of the microcomputer if a low signal is applied to the microcomputer, (col. 18, lines 65-67, col. 19, lines 1-12).

Thus, if not implicit in the teachings of Emmott, it would have been obvious to one of ordinary skill in the art to combine the teachings of Emmott with Fowler to show a microcomputer recognizing a data transmission zone of the signal converting unit if a high signal generated by the signal converting unit is applied to the microcomputer, while the microcomputer recognizes a data transmission zone of the microcomputer if a low signal is applied to the microcomputer. This also would have provided a simple, efficient, user-friendly means for performing cooking operations by downloading cooking information and using the downloaded information to cook food, Fowler, col. 11, lines 3-25.

***Conclusion***

37. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


38. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hassan Phillips whose telephone number is (571) 272-3940. The examiner can normally be reached on M-F 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571) 272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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